Name:

*Mr. Tiénou-Gustafson, Mr. Bielmeier*

Geometry, Period

Due Date: Mon, 13 Jan 2015

**Geometry**

**Homework**

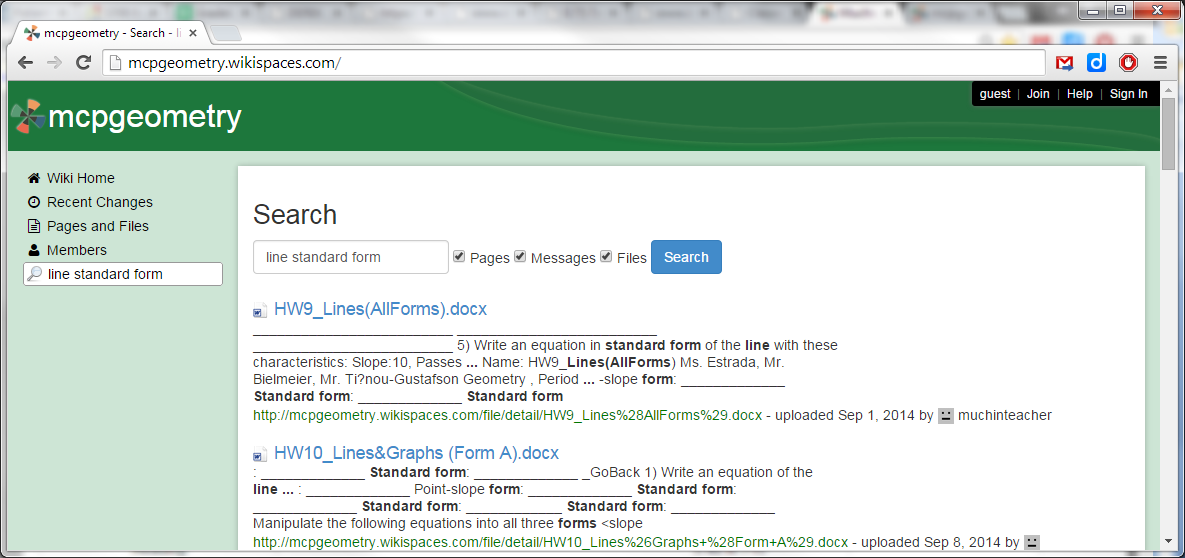


**Preparing for the final:**

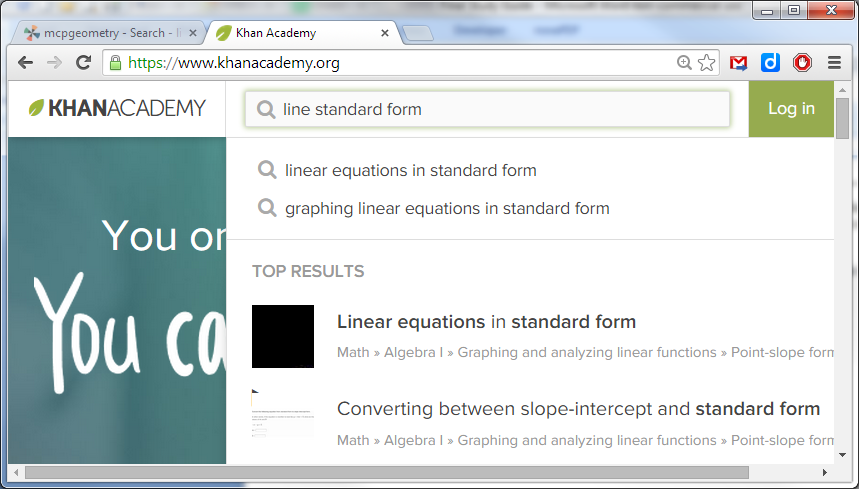
You will be allowed to use ONE 8 ½ by 11 study guide on the final! You may only use ONE side (not both). You can hand write or type your study guide. Study guide MUST be approved by your geometry teacher BEFORE you take the final. If you fail to follow these directions you will NOT be allowed to use your study guide on the final! When in doubt, ask!

|  |  |
| --- | --- |
| **What you can include:**   * Formulas/Rules * Definitions * Ideas/concepts * Diagrams   *Good Example:*  ***A(square) = s2***  *If given the area of a square, remember to take the square root to find length of ONE side* | **Not allowed:**   * Worked out examples.   *Bad Example:*  *The area of a square is 64 inches squared. What is the perimeter of the square?*  *A = s2 64 = s2*  *s = 8*  *P = 4s*  *P = 4 x 8 = 32* |

On the reverse are the units we have covered with a list of skills from each section. It may help you to check these off either if you decide you are very confident with this skill or after you put a hint about this skill on your study guide. *If you don’t recall skills, look at old notes or homework, or find them on the wiki Geometry page:*

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*… or search on Khan academy:*

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***Semester 1 Geometry Skills List***

1. **Foundations of Geometry**
   * Points, lines, planes
   * Collinear, coplanar
   * Absolute value (with number lines, distance, expressions)
   * Distance & line segments
   * Find midpoint given endpoints (on number line or graph)
   * Find endpoint given midpoint & the other endpoint
   * Line bisectors
   * Congruent line segments (with expressions for length)
2. **Linear Algebra**
   * Graph & write the equation of a line from slope + intercept, any point (x,y) + slope, or any 2 points
   * Use slope-intercept, point-slope, and standard form of lines, and manipulate between forms
   * Identify lines that are parallel or perpendicular to another line
3. **Angles**
   * Angle bisectors
   * Solving for x & finding m∠ (given numbers or expressions for angle measures)
   * Complementary & Supplementary angles
   * Angles formed by parallel lines with a transversal (identify all congruent & supplementary angles)
4. **Area & Perimeter**
   * Perimeter & Area of Rectangles
   * Perimeter & Area of Squares
   * Perimeter & Area of Triangles
   * Circumference & Area of Circles (exact using π or approximation in decimal form)
   * Find diameter or radius from the circumference or area of a circle (or vice versa)
   * Finding perimeter or area of composite shapes (made of multiple rectangles & triangles)
   * Find missing angles for triangles (given degrees or expressions)
   * Find missing angle given exterior angle, vertical angles, or parallel lines with a transversal
5. **Exponent Rules**
   * Product Exponent Rule
   * Power Exponent Rule
   * Negative Exponent Rule
   * Quotient Exponent Rule
   * Combining like terms
   * Combining different exponent rules in one expression
   * Simplifying fractions & roots with variables & exponents
   * Perfect squares (1-12) & square roots
   * Simplifying square roots (numbers & variables)
   * Comparing (for values of *x* that are positive, negative, and fractions that are <1)
   * Simplifying inequalities with variable expressions
6. **Quadratics**
   * Factor a quadratic *expression* into two binomials (mix of positive & negative)
   * Decide whether a leading coefficient (*a*) value of a quadratic can be factored out
   * Find the solution(s) to a quadratic *equation*
   * Find the sum or product of solutions of a quadratic equation